

# LED Farming

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Over 6 billion people will live in urbanized metropolitan areas in 2050. Food shortage and overpopulation will be inevitable. This photo shows basil plants grown with LED farming technology. They have been observed in different heights under the same condition to find out the effect of the position of LED lighting on the plant growth. If LED farming is properly implemented, not only would it increase the crop yield but also it can be grown in a well-controlled environment without pesticides. Furthermore, LED farming requires less use of water and land, which will positively help the environment. We have chosen LED lights as a light source because it has the longest lifespan and it is much more energy efficient than any other lighting system. Also, LED lighting can emit an optimal wavelength for the plants to accelerate their growth. Since this is such modern technology, finding out the impact of the position of the LED lighting could help the future of agriculture.

